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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/762,952

01/22/2004

Robert Vincent

104035-00009

5966

45684

7590

10/08/2010

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EXAMINER

RIGGS II, LARRY D

ART UNIT

PAPER NUMBER

1631

MAIL DATE

DELIVERY MODE

10/08/2010

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Advisory Action</b> <b>Before the Filing of an Appeal Brief</b>	<b>Application No.</b> 10/762,952	<b>Applicant(s)</b> VINCENT, ROBERT	
	<b>Examiner</b> LARRY D. RIGGS II	<b>Art Unit</b> 1631	

**--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

THE REPLY FILED 07 September 2010 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☒ The period for reply expires 6 months from the mailing date of the final rejection.  
 b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### NOTICE OF APPEAL

2. ☐ The Notice of Appeal was filed on \_\_\_\_\_. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

#### AMENDMENTS

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because  
 (a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);  
 (b) ☐ They raise the issue of new matter (see NOTE below);  
 (c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or  
 (d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: \_\_\_\_\_. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).  
 5. ☐ Applicant's reply has overcome the following rejection(s): \_\_\_\_\_.  
 6. ☐ Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).  
 7. ☒ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☒ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.  
 The status of the claim(s) is (or will be) as follows:  
 Claim(s) allowed: \_\_\_\_\_.  
 Claim(s) objected to: \_\_\_\_\_.  
 Claim(s) rejected: 1-19 and 94-111.  
 Claim(s) withdrawn from consideration: \_\_\_\_\_.

#### AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).  
 9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing of a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).  
 10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

#### REQUEST FOR RECONSIDERATION/OTHER

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because:  
See Continuation Sheet.  
 12. ☐ Note the attached Information *Disclosure Statement*(s). (PTO/SB/08) Paper No(s). \_\_\_\_\_.  
 13. ☐ Other: \_\_\_\_\_.

/Marjorie Moran/  
 Supervisory Patent Examiner, Art Unit 1631

/LDR/  
 Larry Riggs  
 Examiner, Art Unit 1631

Continuation of 11. does NOT place the application in condition for allowance because: The rejections and/or objections set forth in the Final Office action, mailed 10/29/2009 are maintained for reasons of record.

Applicants arguments filed 09/07/2010 have been fully considered but are not persuasive.

In regard to the current rejections of record, applicants argue that the cited art does not use a method utilizing an algorithm that preferably comprises a linear relationship between the approximate amount of coliform bacteria and the sum of the ratio of the first frequency to the second frequency and the ratio of the second frequency to the third frequency. Applicant argues that by using such an algorithm allows the determination of the approximate amount of the coliform bacteria not just the determination of a presence of bacteria. Applicants argue that Subramaniam simply teaches creating a classification scheme through which cyanobacteria amounts are predicted from chlorophyll concentrations. Applicants argue that Subramaniam does not disclose using an algorithm that implements ratios of measured reflectances to determine the amount of any type of bacterium. Applicants argue that the present invention provides a method for determining the quantitative amount of coliform directly from an algorithm relating ratios of measured light reflectances obtained from LANDSAT TM. Applicants argue that a quantitative number for the concentration of organic suspended material in water is not the same thing as determining an actual amount of a specific bacteria type. Applicants argue that which Subramaniam uses an algorithm that discloses a linear relationship, it does not utilize ratios of measured reflectances and it is not obvious to combine the cited art

Applicant's arguments have been considered but are not persuasive.

In regards to the argument that the cited art does not use a method utilizing an algorithm that preferably comprises a linear relationship between the approximate amount of coliform bacteria and the sum of the ratio of the first frequency to the second frequency and the ratio of the second frequency to the third frequency, the instant claims do not provide such limitation. As applicant provides, the specification describes an algorithm that preferably contains such linear relationship and ratios. Limitations cannot be read into the claims from the specification. The instant claim 1 step b) only recites determining the approximate amount of the coliform in water from respective amount of light by applying an algorithm relating the respective amount of light at three wavelength ranges to the amount of coliform bacteria in the water. Dependent claim 3 does recite an algorithm with ratios of light measurements and a linear relationship to an amount of coliform, but Turdukulov teaches measurements at different light ratios (Figures 3.7, 3.8) vs. chlorophyll concentrations, and Subramaniam teaches an algorithm providing a linear relationship between chlorophyll concentration and bacteria in water, (pages 116-117; Figures 2, 4). Subramaniam provides the limitation of the linear relationship of concentration of chlorophyll with concentration of bacteria in water. In regards to applicants argument that the concentration of organic suspended material in water is not the same thing as the actual amount of a specific type of bacteria, the Examiner never said this. Turdukulov teaches organic suspended matter (OSM) concentrations that includes pathogenic bacteria, such as coliform bacteria, e.g. E. coli (page 2, 14, 67; Figures 2.5, D4) with measurements obtained by Landsat TM satellite, but Turdukulov et al does not teach determining an amount of bacteria from the water. Subramaniam provides that limitation as noted above, and it is obvious to combine the cited art as noted in the rejection of record. As such, applicant's arguments are not persuasive with respect to the latest claims of record, filed 09/07/2010.